

10/539437

JC20 Rec'd PCT/PTO 20 JUN 2005

PATENT

Docket No. 32860-000900/US

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant(s): Walter GUMBRECHT et al.
Int'l Application No.: PCT/DE2003/004136
Application No.: NEW APPLICATION
Filed: June 20, 2005
For: METHOD AND DEVICE FOR PCR-AMPLIFICATION AND
DETECTION OF NUCLEOTIDE SEQUENCES

**INFORMATION DISCLOSURE STATEMENT
(SUBMISSION CONCURRENT WITH THE
FILING OF A NEW PATENT APPLICATION)**

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314
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June 20, 2005

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- ☐ Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☒ This application is a National Phase of a PCT application. All of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.

- ☐ Because the present application is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

a. ☐ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The attached patents, publications, or other information in the English language do not require a statement of relevancy.

b. ☒ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

Many of the documents have been discussed in the PCT Search Report, the PCT Preliminary Examination Report, and/or throughout the specification. The PCT Search Report and German translation aid translating key terms into English, indicate the degree of relevance found by the PCT Office, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

c. ☒ **ENGLISH LANGUAGE SEARCH REPORT**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

d. ☒ **OTHER**

The following additional information is provided for the Examiner's consideration.

- International Search Report, International Preliminary Examination Report and German Translation Aid.

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New PCT National Phase Application
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FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 08-0750.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By: _____

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Enclosures:

- ☒ Form PTO-1449(s)
- ☒ Documents
- ☒ Foreign Search Reports

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PTO/SB/08a (05-03)

Approved for use through 12/30/2003. OMB 0651-0031

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of

Application Number

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New Application

Filing Date

June 20, 2005

First Named Inventor

Walter GUMBRECHT et al.

Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

32860-000900/US

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-			
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	1	WO 00/62036 A	19-10-2000	Nanogen/Becton Dickinson Partnership		
	2	WO 00/60919 A				
	3	WO 00/58522 A	05-10-2000	Nanogen Inc.		
	4	WO 01/34842 A2	17-05-2001	University of Chicago		
	5	DE 196 10 115 G2	18-09-1997	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung eV		x
	6	WO 01/42508 A2	14-06-2001	Motorola, Inc.		
	7	WO 99/36576 A1	22-07-1999	Packard Bioscience Company		

Examiner
Signature

Date
Considered

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Application Number	10/1539437
Filing Date	June 20, 2005
First Named Inventor	Walter GUMBRECHT et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	32860-000900/US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	8	Fuchs et al: "A silicon lab-on-chip for integrated sample preparation by pcr and dna analysis by hybridization" Annual International IEEE-EMBS special topic conference on microtechnologies in medicine and biology. Proceedings, XX, XX, 2.5.2002, S. 227-231, XP001180969	
	9	Hodko D et al: "Detection of pathogens using on-chip electrochemical analysis of pcr amplified dna molecules", Proceedings of the Spie, Spie, Bellingham, VA, US, Bd. 4265, 25.01.2001, S. 65-74, XP008000573	
	10	Sosnowski R G et al: "Rapid determination of single base mismatch mutations in dna hybrids by direct electric field control" Proceedings of the national academy of sciences of USA, National Academy of Science, Washington, US, Bd. 94, Februar 1997, S. 1119-1123, XP000857636	
	11	Gilles P N et al: "Single nucleotide polymorphic discrimination by an electronic dot blot assay on semiconductor microchips" Nature Biotechnology, Nature Publishing, US, Bd. 17, April 1999, S. 365-370	
	12	Tillib SV, Strizhkov BN, Mirzabekov AD, Datenbank PubMed bei NCBI, Anal. Biochem. (2001) 292 (1) 155-60	
	13	Dubiley, S. u.a.: Polymorphism analysis and gene detection by minisequencing on an array of gel-immobilized primers, Nucleic Acids Research, 1999, Vol. 27, No. 18, e19, 1-6	
	14	Strizhkov, B.N. u.a.: PCR amplification on a microarray of gel-immobilized oligonucleotides: detection of bacterial toxin- and drug-resistant genes and their mutations. Biotechniques (2000) 29 (4) 844-8, 850-2, 854	
	15	Kolchinski, A. & Mirzabekov A.: Analysis of SNPs and other genomic variations using gel-based chips, Hum Mutat. (April 2002) 19 (4) 343-60	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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